

IN THE CLAIMS

Please amend the claims as follows:

1-20. (Canceled)

21. (Currently Amended) A substrate processing apparatus, comprising:
a processing section for performing coating and developing processing for a substrate;
an interface section, for transferring the substrate at least via a route between the processing section and an aligner for subjecting the substrate to exposure processing, divided into a first area for transferring the substrate delivered from the processing section to the aligner and a second area for transferring the substrate delivered from the aligner to the processing section; and

~~a first gas supply device for supplying an inert gas to the first area;~~

~~a first exhaust device for exhausting an atmosphere in the first area;~~

~~a second gas supply device for supplying the inert gas to the second area; and~~

~~a second exhaust device for exhausting an atmosphere in the second area~~

a control section for controlling atmospheres in the first and second areas.

22. (Currently Amended) ~~A substrate processing~~ The apparatus, comprising as set forth in claim 21, wherein:

~~a processing section for performing coating and developing processing for a substrate;~~
~~an interface section for transferring the substrate at least via a route between the processing section and an aligner for subjecting the substrate to exposure processing;~~

the first area comprises a chamber, disposed ~~inside in~~ in the interface section, for temporarily holding the substrate delivered from the processing section and to be transferred to the aligner; and

the control section comprises an atmosphere controller for controlling an atmosphere in the chamber.

23. (Original) The apparatus as set forth in claim 22,

wherein the atmosphere controller reduces a pressure inside the chamber.

24. (Original) The apparatus as set forth in claim 22,

wherein the atmosphere controller supplied an inert gas into the chamber.

25. (Original) The apparatus as set forth in claim 22,

wherein the atmosphere controller supplies dry air into the chamber.

26. (Original) The apparatus as set forth in claim 22,

wherein the chamber comprises:

a purge room for temporarily holding and purging the substrate introduced into the chamber;

a buffer room for holding the substrate; and

a transfer device for transferring the substrate between the purge room and the buffer room.

27. (Original) The apparatus as set forth in claim 26,

wherein the buffer room has a transit opening for directly carrying out the substrate to the aligner.

28. (Original) A substrate processing apparatus, comprising:

a coating processing unit for at least forming a coating film on a substrate;

a developing processing unit for developing the substrate;

a thermal processing unit for thermally processing the substrate;

a transfer device for carrying the substrate into/out of the coating processing unit, the developing processing unit, and the thermal processing unit; and

a blower for sending an inert gas to the substrate which is being transferred by the transfer device.

29. (Original) The apparatus as set forth in claim 28,

wherein the transfer device has tweezers for holding the substrate, and

wherein the blower has a top cover having a blast port for sending the inert gas from above the tweezers.

30. (Original) The apparatus as set forth in claim 29,

wherein a plurality of the blast ports are provided to correspond to a shape of the tweezers.

31. (Original) The apparatus as set forth in claim 29,

wherein a plurality of the blast ports are provided to correspond to a shape of the substrate.

32. (Original) The apparatus as set forth in claim 28,

wherein the blower has a temperature control mechanism for controlling a temperature of the inert gas.

33. (Original) The apparatus as set forth in claim 28,

wherein the blower has a humidity control mechanism for controlling a humidity of the inert gas.

34. (Original) The apparatus as set forth in claim 28,

wherein the blower sends the inert gas when the transfer device transfers the substrate from the coating processing unit to the thermal processing unit.

35. (Original) A substrate processing apparatus, comprising:

a reaction inhibiting section for performing processing of inhibiting progress of a resolution reaction of a resist for a substrate coated with the resist and exposed;

a heating section for heating the substrate processed in the reaction inhibiting section to progress the resolution reaction of the resist;

a cooling section for cooling the substrate heated in the heating section to inhibit the progress of the resolution reaction of the resist; and

a developing processing section for performing coating processing of a developing solution for the substrate cooled in the cooling section.

36. (Currently Amended) A substrate processing apparatus, comprising:

a ~~cassette~~ first station including a mounting section on which a substrate cassette housing a plurality of substrates is mounted and a delivery means for receiving and sending the substrate from/to the substrate cassette mounted on the mounting section; and

a ~~processing~~ second station, connected to the ~~cassette~~ first station, for processing the substrate transferred by the delivery means; and ~~an interface station~~ for delivering the substrate between the processing station and an aligner for subjecting the substrate to exposure processing,

wherein the ~~interface~~ second station includes:

~~a reaction inhibiting section for performing processing of inhibiting progress of a resolution reaction of a resist for a substrate coated with the resist and exposed, and~~

~~wherein the processing station includes~~ a heating section for heating the substrate ~~processed in the reaction inhibiting section~~ to progress the resolution reaction of the resist,

a cooling section for cooling the substrate heated in the heating section to inhibit the progress of the resolution reaction of the resist, and

a developing processing section for performing coating processing of a developing solution for the substrate.

37. (Original) The apparatus as set forth in claim 36,

wherein the reaction inhibiting section is placed near the aligner.

38. (Original) The apparatus as set forth in claim 35,

wherein the reaction inhibiting section inhibits the progress of the resolution reaction of the resist by cooling the substrate coated with the resist and exposed so as not to cause dew formation.

39. (Original) The apparatus as set forth in claim 35,

wherein the reaction inhibiting section inhibits the progress of the resolution reaction of the resist by making an amount of moisture adhering to the substrate coated with the resist and exposed smaller than an amount of moisture adhering to the substrate when the substrate is transferred to the reaction inhibiting section.

40. (Original) The apparatus as set forth in claim 39,

wherein the reaction inhibiting section makes the amount of the moisture adhering to the substrate smaller than the amount of the moisture adhering to the substrate when the substrate is transferred to the reaction inhibiting section by supplying a gas having a humidity lower than a humidity of air in an atmosphere in which the reaction inhibiting section is placed.

41. (Original) The apparatus as set forth in claim 35,

wherein the resist is a chemically amplified resist, the resolution reaction of which is progressed by an acid produced by exposure.

42. (Original) The apparatus as set forth in claim 35,

wherein the reaction inhibiting section controls an extent to which the progress of the resolution reaction of the resist is inhibited according to an area of the substrate coated with the resist and exposed.

43. (Original) A substrate processing method, comprising the steps of:

performing processing of inhibiting progress of a resolution reaction of a resist for a substrate coated with a resist and exposed;

heating the substrate subjected to the processing of inhibiting the progress of the resolution reaction of the resist to progress the resolution reaction of the resist;

cooling the heated substrate to inhibit the progress of the resolution reaction of the resist; and

performing coating processing of a developing solution for the cooled substrate.

44. (Original) The method as set forth in claim 43,

wherein in the reaction inhibiting step, by cooling the substrate coated with the resist and exposed so as not to cause dew formation, the progress of the resolution reaction of the resist is inhibited.

45. (Original) The method as set forth in claim 43,

wherein in the reaction inhibiting step, the progress of the resolution reaction of the resist is inhibited by making an amount of moisture adhering to the substrate coated with the resist and exposed smaller than an amount of moisture adhering to the substrate when the substrate is transferred in the reaction inhibiting step.

46. (Original) The method as set forth in claim 43,

wherein in the reaction inhibiting step, an amount of moisture adhering to the substrate is made smaller than an amount of moisture adhering to the substrate when the substrate is transferred in the reaction inhibiting step by supplying a gas having a humidity lower than a humidity of air in an atmosphere in the reaction inhibiting step.

47. (Original) The method as set forth in claim 43,

wherein the resist is a chemically amplified resist, the resolution reaction of which is progressed by an acid produced by exposure.

48. (Currently Amended) ~~A substrate processing~~ The method as set forth in claim 43,
~~comprising the steps of wherein:~~

~~coating a substrate with a resist;~~

~~transferring the substrate coated with the resist and exposed to a heating section while inhibiting a resolution reaction of the resist;~~

~~heating the transferred substrate~~ comprises heating the substrate in the a heating
section to progress the resolution reaction of the resist; and

performing processing of inhibiting progress comprises transferring the substrate coated with the resist and exposed to the heating section while inhibiting a resolution reaction of the resist

~~cooling the substrate on which the resolution reaction is progressed to inhibit the progress of the resolution reaction of the resist; and~~

~~performing coating processing of a developing solution for the substrate on which the progress of the resolution reaction is inhibited.~~

49. (Original) The method as set forth in claim 48,
wherein in the transferring step, the exposed substrate is transferred to the heating section while the progress of the resolution reaction of the resist is inhibited by cooling the exposed substrate so as not to cause dew formation.

50. (Original) The method as set forth in claim 48,
wherein in the transferring step, the substrate is transferred to the heating section while the progress of the resolution reaction of the resist is inhibited by making an amount of moisture adhering to the substrate when the substrate is transferred to the heating section smaller than an amount of moisture adhering to the substrate after exposure.

51. (Original) The method as set forth in claim 50,
wherein in the transferring step, the amount of the moisture adhering to the substrate when the substrate is transferred to the heating section is made smaller than the amount of the moisture adhering to the substrate after exposure by transferring the substrate to the heating section while supplying a gas having a lower humidity than air to the exposure substrate.

52. (Original) The method as set forth in claim 48,
wherein the resist is a chemically amplified resist, the resolution reaction of which is progressed by an acid produced by exposure.

53. (Currently Amended) ~~A substrate processing apparatus, comprising~~

The apparatus as set forth in claim 35, wherein:

~~the a heating section for heating a substrate is~~ exposed in an exposure section for exposing the substrate coated with a the resist ~~to progress the resolution reaction of the resist;~~
and

the reaction inhibiting section comprises a transfer section for transferring at least the exposed substrate to the heating section with the resolution reaction of the resist being inhibited;

~~a cooling section for cooling the heated substrate to inhibit the progress of the resolution reaction of the resist; and~~

~~a developing processing section for performing coating processing of a developing solution for the cooled substrate.~~

54. (Original) The apparatus as set forth in claim 53,

wherein a cooling section cools a transfer area of the substrate between the exposure section and the heating section so as not to cause dew formation to inhibit the resolution reaction of the resist.

55. (Original) The apparatus as set forth in claim 53, further comprising:

a gas supply section for supplying a gas having a humidity lower than air to a transfer area of the substrate between the exposure section and the heating section to make an amount of moisture adhering to the substrate when the substrate is transferred to the heating section smaller than an amount of moisture adhering to the substrate after exposure.

56. (Original) A substrate processing apparatus, comprising:

a cassette station including a mounting section on which a substrate cassette housing a plurality of substrates is mounted and a delivering means for receiving and sending the substrate from/to the substrate cassette mounted on the mounting section;

a processing station, connected to the cassette station, for processing the substrate transferred by the delivery means; and

an interface station for delivering the substrate between the processing station and an aligner for subjecting the substrate to exposure processing,

wherein the processing station comprises;

a heating section for heating the exposed substrate to progress a resolution reaction of a resist;

a cooling section for cooling the substrate heated in the heating section to inhibit the progress of the resolution reaction of the resist; and

a developing processing section for performing coating processing of a developing solution for the substrate, and

wherein the interface station is cooled so as not to cause dew formation on the substrate to inhibit the resolution reaction of the resist.

57. (Original) A substrate processing apparatus, comprising:

a cassette station including a mounting section on which a substrate cassette housing a plurality of substrates is mounted and a delivery means for receiving and sending the substrate from/to the substrate cassette mounted on the mounting section;

a processing station, connected to the cassette station, for processing the substrate transferred by the delivery means; and

an interface station for delivering the substrate between the processing station and an aligner for subjecting the substrate to exposure processing,

wherein the interface station comprises a heating section for heating the exposed substrate to progress a resolution reaction of a resist,

wherein the processing station comprises:

a cooling section for cooling the substrate heated in the heating section to inhibit the progress of the resolution reaction of the resist; and

a developing processing section for performing coating processing of a developing solution for the substrate, and

wherein the interface station is cooled so as not to cause dew formation on the substrate to inhibit the resolution reaction of the resist.

58. (Original) The apparatus as set forth in claim 56, further comprising:

a gas supply section for supplying a gas having a humidity lower than air to the interface station to make an amount of moisture adhering to the substrate when the substrate is transferred to the heating section smaller than an amount of moisture adhering to the substrate after exposure.

59. (Original) The apparatus as set forth in claim 53, further comprising:

a gas supply section for supplying a gas the temperature and/or humidity of which is regulated to a face to be processed of the substrate while the substrate is transferred from the exposure section to the heating section by the transfer section.

60. (Original) The apparatus as set forth in claim 59, further comprising:

a temperature regulating section for regulating at least either of the temperature or the humidity of the gas supplied from the gas supply section to the face to be processed of the substrate to inhibit the progress of the resolution reaction of the resist.

61. (Original) The apparatus as set forth in claim 53,

wherein the resist is a chemically amplified resist, the resolution reaction of which is progressed by an acid produced by exposure.

62. (New) The apparatus of claim 21, wherein the control section comprises:

a first gas supply device for supplying an inert gas to the first area;

a first exhaust device for exhausting an atmosphere in the first area;

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Preliminary Amendment

a second gas supply device for supplying the inert gas to the second area; and

a second exhaust device for exhausting an atmosphere in the second area.